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Subcommittee on Telecommunications and the Internet

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Mr. Chairman, I'm pleased to accept your invitation to testify today on behalf of both Corning Incorporated and the Telecommunications Industry Association.

As you know, Corning is the inventor of low-loss optical fiber. In fact, your former colleague in the House of Representatives, Amo Houghton, should be properly identified as one of the fathers of fiber optics. He was at the helm of Corning at the time optical fiber was invented, and he invested hundreds of millions of dollars to prove to the world that data can be transmitted over extremely long distances using glass fibers as thin as hair.

Corning is also a member of the Telecommunications Industry Association. TIA provides a forum for over 600 member companies, the manufacturers and suppliers of products, and services used in global communications. Many TIA members manufacture and supply products and services used in the deployment of the broadband infrastructure that enables the distribution of video programming. Because video programming and the franchise process is the core of the proposed legislation, my testimony today focuses on TIA's interest in this area.

We approach telecommunications policy from a very simple perspective. The question for us is: What policies will facilitate investment in network technologies to promote facilities-based competition in the interest of both producers and consumers?

Contrary to popular view, we do not see the issue before Congress as a matter of choosing sides among the titans. Rather, we see the challenge as one of encouraging and

allowing all parties to do their part in developing the most robust broadband communications network in the world. That is the outcome that will provide the greatest benefit to all Americans.

The First and Second Broadband Technology Shifts

With that in mind, we think it is helpful to review the recent history of broadband technology. Essentially, we believe there are two technology shifts occurring in broadband.

The first broadband technology shift is from dial-up Internet access to current-generation broadband access. This is characterized as a shift from 56 kilobit-per-second narrowband capability to around 1.5 megabit-per-second ("Mbps") broadband capability – roughly a 20-fold capacity expansion.

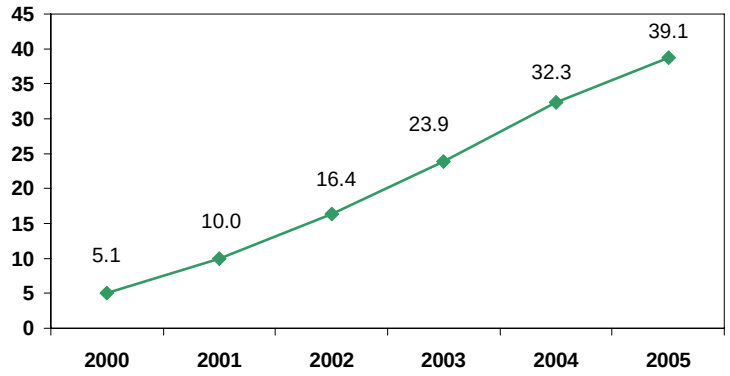
The second broadband technology shift is from current-generation to next-generation broadband access, characterized by yet another 20-fold capacity, from 1.5 Mbps to as much as 25-30 Mbps.

To give you an example of the effect of these two shifts, let me use the analogy of a highway. The first broadband technology shift is like going from a two-lane highway to 40-lane highway. The second shift is like from going from 40 lanes to 800 lanes. Just imagine I-95 going from 2 to 40 to 800 lanes.

The good news is that the first shift is well on its way. Progress in technology deployment is often measured by the substitution of the new for the old. By this measurement tremendous progress has been made in the deployment of broadband, where subscribership increased by more than 700% from 5.1 million in 2000 to 39.1 million in 2005, while dial-up subscribership peaked at 47.3 million in 2002 and has since declined to about 40 million subscribers, the level that existed in 2000.[1]

[1] *See* Telecommunications Industry Association , *Telecommunications Market Review and Forecast,* 2005.

U.S. Current Generation Broadband Subscribers
(in Millions)



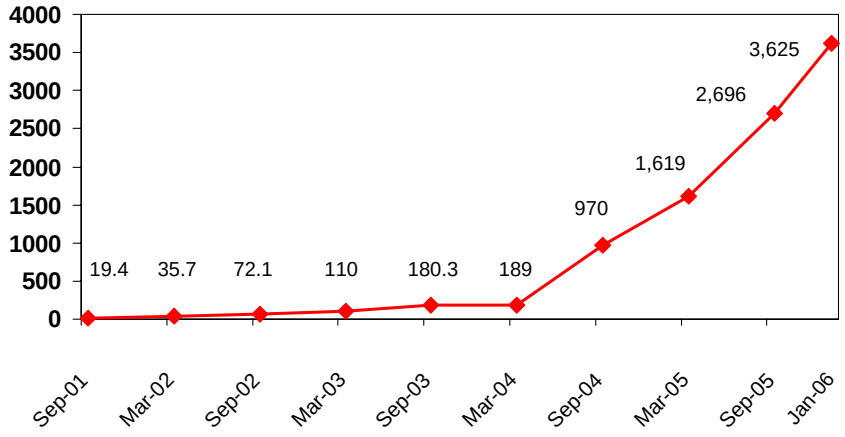
Source: In-Stat/MDR, FCC, TIA, Wilkofsky Gruen Associates

The second broadband technology shift has just begun and involves a number of different technologies, including fiber to the premises (FTTP), fiber to the node (FTTN), fiber to the curb (FTTC), VDSL, DOCSIS 2x and DOCSIS 3.0, satellite and various wireless technologies, all of which hold great promise and are in various stages of development and deployment.

Although TIA companies are involved in all of these technologies, I am most familiar with FTTP and will confine my remarks regarding the second broadband shift to that technology. With respect to FTTP, the second stage shift, although in its infancy, has been profound. From September 2001 to January 2006, FTTP deployment increased from 19,400 homes passed to 3.6 million homes passed, an 18,500 % increase in four years. FTTP subscribership increased from 5,500 in September 2001 to 548,000 in January 2006, a 10,000% increase over four years.[2]

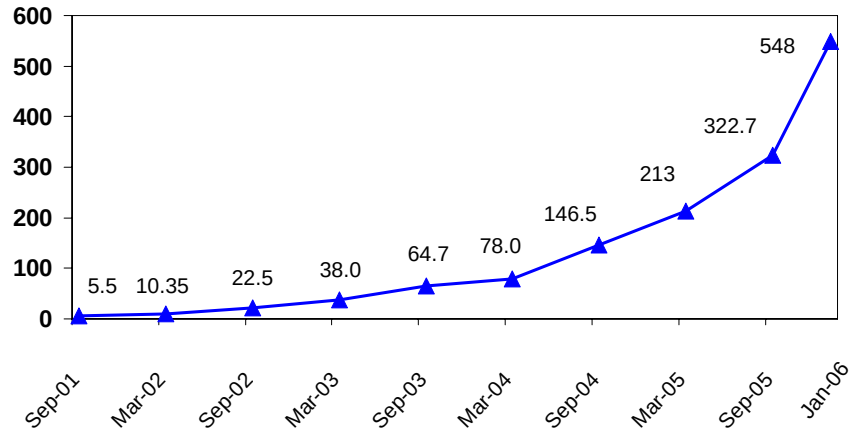
[2] *See* RVA Research, *FTTH/FTTP Update*, Jan. 2006.

FTTH Homes Passed
(Cumulative—North America)
in Thousands



Source: RVA Research

FTTH Homes Connected
(Cumulative—North America)
in Thousands



Source: RVA Research

While Verizon accounts for much of the FTTP deployment in volume, the FTTP experience is broadly based. As of October 2005, FTTP had been deployed in 652 communities across 46 states, with only 34% of those communities served by Verizon.[3]

[3] *See* RVA Research, *FTTH/FTTP Update*, Oct. 2005.

The Importance of Pro-Competitive, Deregulatory Telecommunications Policy

The first broadband technology shift was driven by four forces: competition, deregulation, consumer demand for bandwidth, and technology advancement. The federal government played a positive and significant role in the first two of those factors – competition and deregulation. House passage of the Tauzin-Dingell bill[4] in February 2002 spurred three major decisions by the FCC which created a favorable environment for broadband investment: the cable modem decision of 2002[5], the Triennial Review Order of 2003[6], and, most recently, the DSL decision of 2005[7]. Thus, the pro-competitive, deregulatory actions taken by this body and by the Commission have worked to encourage the first broadband technology shift.

To best facilitate the second technology shift, Congress should continue its pro-competitive, deregulatory stance. And indeed, Congress has already taken steps in this direction. Most recently, with leadership from this Committee, Congress adopted a "hard date" for the DTV transition[8] which will release prime spectrum for the development of new wireless solutions. Congress has also encouraged the FCC to facilitate competition in the wireline voice market by applying the light hand of regulation for VoIP, which will enable cable companies and new entrants to compete with incumbent telephone companies.[9]

Promoting competition through deregulation in the video realm is the next logical step. Video is the application driver for the deployment of next generation broadband

[4] *See* United States. Cong. House of Representatives. Internet Freedom and Broadband Deployment Act of 2001. 107th Cong. H.R. 1542. Washington: GPO, 2001.
[5] *See* FCC GN Docket No. 00-185, CS Docket No. 02-52, (rel. March 15, 2002).
[6] *See* FCC CC Docket No. 01-338, (rel. Aug. 21, 2003).
[7] *See* FCC CC Docket No. 02-33. (rel. Sept. 23, 2005).
[8] *See* Deficit Reduction Act of 2005, Pub. L. no. 109-171, Title III Digital Television Transition and Public Safety.
[9] *See* FCC CC Docket No. 04-267. (adopted Nov. 9, 2004).

because video uses an enormous amount of bandwidth. Even with the latest compression techniques, a high definition television signal uses approximately 8 to 9 Mbps, several times faster than current-generation broadband. Therefore, a public policy facilitating entry of new video providers will result in the deployment of more robust infrastructure, increased competition and consequent consumer benefit.

Specific Problems With The Current Video Franchise Process

Problem 1: Delay

Unfortunately, the current video franchise process does not facilitate the entry of new video providers in a timely fashion. The franchise-by-franchise negotiation process established under the old monopoly framework is simply too slow and unwieldy to encourage the speedy entry of new providers. Verizon has filed documents with the FCC establishing that, to serve its entire target area with video service, it must negotiate between 2,000 and 3,500 franchises, excluding those in Texas.[10] Verizon began negotiations with 320 franchise authorities in November 2004 and, as of February 2005, had only 26 franchises other than those that were automatically issued in Texas.[11] For those franchises that have been successfully negotiated, negotiation time has ranged between two months and 17 months, with an average of 7.65 months.[12] The more important focus, however, are the negotiations in which Verizon has *not* been successful: in over 80% of the franchise negotiations Verizon initiated in November 2004, a franchise still has not been granted.[13]

[10] *See* FCC MB Docket No. 05-311, *Comments of Verizon on Video Franchising*, Feb 13, 2006, Attachment A at 5.
[11] *See* FCC MB Docket No. 05-311, *Comments of Verizon on Video Franchising*, Feb 13, 2006, Attachment A at 4.
[12] *See* FCC MB Docket No. 05-311, Comments of Verizon on Video Franchising, Feb 13, 2006, Attachment A, Exhibit 1.
[13] *See supra footnote 11.*

A similar situation has been experienced by BellSouth, which needs to negotiate 1,000 franchises. As of last month, it had received only 20 franchises, requiring between 1.5 months and 32 months of negotiation time for each, at an average of 10 months.[14]

Moreover, this is not just a problem for the Regional Bell Operating Companies. Smaller companies such as Knology, Grande Communications, Guadeloupe Valley Telecommunications Cooperative and the Merton Group have all reported a similarly protracted period of franchise negotiations, ranging between 9 months and 30 months.[15]

The delayed entry of these competitive video providers results in less competition, less consumer welfare benefit, and delay in the second broadband technology shift.

Problem 2: Build Out

The second major problem with the current video franchise process is the practice of requiring new entrants to build out facilities beyond the area which they find economical. For example, in the case of a telephone company entering the video market, video deployment logically follows the existing wire center footprint, which typically does not follow franchise area boundaries.[16] If a telephone company wants to offer video service throughout a wire center which covers, say, 30% of a local franchise area, the requirement to build out to the entire franchise area might well make it economically infeasible to provide video service *at all* within that franchise area.

This is not merely a whimsical example. We recently analyzed telephone company wire centers in Texas – where the characteristics of wire center deployment are typical of the nation on average – and found that only 3% of the wire centers completely overlap the geographic area of franchise areas.

[14] *See* FCC MB Docket No. 05-311, *Comments of BellSouth Corporation and BellSouth Entertainment,* LLC, Feb. 13, 2006, at 10, 11.
[15] *See* FCC MB Docket No. 05-311, *Comments of the Fiber-to-the-Home Council*, Declarations of Felix Boccucci, Andy Sarwal, Jeff Mnick, Terrence McGarty.
[16] *See* FCC MB Docket No. 05-311, *Comments of Verizon on Video Franchising*, Feb. 13, 2006, at 40.

Therefore, the requirement that new entrants build out to an entire franchise area will result, in many instances, in potential competitors delaying or even abandoning plans to enter new video markets.

Again, this is not just a Bell Company problem. The National Telecommunications Cooperative Association has reported that many of its members, which tend to be small rural telephone companies, want to get into the cable business but have reported problems with local franchising authorities – particularly unreasonably short build out periods or requirements to build outside the carrier's own service territory.[17]

The solution, we believe, is to establish a franchise process which does not require such counterproductive build out requirements.

Problem 3: Extraneous Obligations

The third major problem with the current video franchise process is the imposition of extraneous obligations that exceed 1% of revenues.

The Congress has already indicated its intent to limit payments for franchises by establishing in Title VI of the Communications Act that the 5% statutory franchise fee is a ceiling for payments "of any kind".[18] Yet, franchise authorities often seek payments that far exceed the 5% fee by imposing requirements like the assumption of all Public, Education and Government (PEG) costs incurred by the incumbent cable operator over the entire span of its service, the installation of institutional networks (I-Nets), the requirement to bury aerial plant, the assumption of applications and acceptance fees, etc.[19] These extraneous requirements increase costs and discourage the investment in next-generation broadband capability thereby delaying the second technology shift. The

[17] *See* FCC MB Docket No. 05-311, *Comments of the National Telecommunications Cooperative Association*, Feb. 13, 2006, at 4,5.
[18] *See* U.S.C. Sec. 542(g)(1).
[19] *See* FCC MB Docket No. 05-311, *Comments of Verizon on Video Franchising*, Feb. 13, 2006, at 57-75.

solution, we believe, is to prohibit the imposition of extraneous cost beyond 1% of gross revenues.

Treatment of Existing Video Providers

We are also pleased that the draft bill would make its national franchise available to existing cable TV providers in competitive markets. We think this is very important in order to encourage investment by all providers and to spur healthy competition.

Municipal Broadband

To promote competition, Congress also should enable municipalities to deploy next generation broadband capability. Particularly regarding fiber to the premises, municipalities were among the early leaders, even though recent court decisions have slowed deployments in a number of states. Although we believe municipalities should consider all options before entering the telecom field, if municipal leaders feel that they must build their own networks in order to provide satisfactory broadband services to their constituents, they should have the freedom to make that decision. The draft bill before you includes the necessary statutory clarification to allow municipal entry.

Net Neutrality

Finally, Congress should avoid taking action which could, in fact, do harm. This principle must be applied to the issue which has gained a tremendous amount of attention of late – the so-called "net neutrality" issue.

Clearly, consumers buying broadband access from any provider should get the capacity they purchase, it should not be blocked, and they should be able to connect devices of their choosing, provided such devices do no harm to the network. These principles were originally proposed by the High-Tech Broadband Coalition (HTBC), with the participation of TIA, and were adopted by the FCC last year. TIA recently released

its *Broadband Internet Access Connectivity Principles*, which reaffirms and adds to the abovementioned principles. We attach a copy hereto for your use.

Similarly, unaffiliated applications developers, as consumers of bandwidth, should have rights, as well. They, too, should be able to use the bandwidth they purchase without being blocked. However, we have yet to see significant evidence of an actual problem. Rather, net neutrality advocates appear to be concerned about potential misdeeds rather than actual misdeeds.

Conclusion

We feel that it is crucial for the Congress to continue the string of pro-competitive, deregulatory federal policy actions that have occurred regarding telecommunications since 2002. The draft legislation now under consideration by this Committee follows in that vein. We believe this constitutes good public policy because it will: 1) help meet consumer demand for bandwidth; 2) enhance consumer welfare through price competition; 3) increase investment; 4) increase jobs; and 5) enhance American competitiveness. We are pleased to give it our support.